CLAIMS

What is claimed is:

5   1. A peptide comprising an amino acid sequence of
the formula:

$a^1a^2a^3Ca^5a^6a^7a^8a^9a^{10}a^{11}LQSCa^{16}a^{17}a^{18}$ (SEQ ID NO: 276)

wherein:

   a^1 is L, P, W, F, S, Y, N, R, or H;

10   a^2 is L, W, F, S, Y, D, or R;

   a^3 is L, I, W, Y, D, or E;

   a^5 is A, L, G, D, E, or K;

   a^6 is A, L, F, S, N, E, K, or H;

   a^7 is L, P, Y, or N;

15   a^8 is A, P, M, F, G, Q, or D;

   a^9 is P, M, T, G, or S;

   a^{10} is A, V, F, H, G, or S;

   a^{11} is V, L, I, F, T, N, or K;

   a^{16} is L, I, W, M, or F;

20   a^{17} is A, G, S, W, or N;

   a^{18} is F, W, or Y; or a physiologically
acceptable salt thereof, and wherein said peptide is
capable of inhibiting NGF activity.

25   2. The peptide according to Claim 1 wherein:

   a^1 is W;

   a^2 is D;

   a^6 is F;

   a^{10} is A;

30   a^{11} is K;

   a^{16} is F.

3.   The peptide according to Claim 1 comprising the amino acid sequence of WDMCHFSHAAKLQSCFPH (SEQ ID NO:273).

5

4.   A composition of matter comprising at least one peptide according to Claim 1 and at least one vehicle, wherein said composition of matter is capable of inhibiting NGF activity.
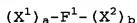
10

5.   The composition of matter according to Claim 4 wherein said vehicle is selected from the group consisting of a Fc domain, polyethylene glycol, a lipid, a cholesterol group, a carbohydrate, and an

15   oligosaccharide.

6.   The peptide according to Claim 1 which is cyclic.

20   7.   A dimer or multimer of the peptide according to Claim 1.

8.   A composition of matter of the formula:
$$(X^1)_a-F^1-(X^2)_b$$
25   wherein:
     F^1 is a Fc domain;
     X^1 and X^2 are each independently selected from
          $-(L^1)_c-P^1$;
          $-(L^1)_c-P^1-(L^2)_d-P^2$;
30          $-(L^1)_c-P^1-(L^2)_d-P^2-(L^3)_e-P^3$; and
          $-(L^1)_c-P^1-(L^2)_d-P^2-(L^3)_e-P^3-(L^4)_f-P^4$;

wherein one or more of P^1, P^2, P^3, and P^4 each
independently comprise a peptide according to Claim 1;

L^1, L^2, L^3, and L^4 are each independently linkers;
and

5   a, b, c, d, e, and f are each independently 0 or
1, provided that at least one of a and b is 1; or a
physiologically acceptable salt thereof, and wherein
said peptide is capable of inhibiting NGF activity.

10   9.   The composition of matter according to Claim 8
wherein one or more of P^1, P^2, P^3, and P^4 each
independently comprise a peptide as shown in SEQ ID
NO:273.

15   10.   The composition of matter of Claim 8 of the
formula: F^1-X^2.

        11.   The composition of matter of Claim 8 of the
formula: F^1-$(L^1)_c$-P^1.

20

        12.   The composition of matter of Claim 8 of the
formula: F^1-$(L^1)_c$-P^1-$(L^2)_d$-P^2.

        13.   The composition of matter of Claim 8 of the
25   formula: P^1-$(L^1)_c$-F^1-$(L^2)_d$-P^2.

        14.   The composition of matter of Claim 11 wherein
F^1 is an Fc domain or a fragment thereof.

15.   The composition of matter of Claim 14 wherein F^1 comprises the amino acid sequence of SEQ ID NO: 60 or a fragment thereof.

5   16.   The composition of matter of Claim 15 wherein L^1 is a peptide linker as shown in SEQ ID NO:285.

17.   A polynucleotide comprising a polynucleotide sequence encoding the peptide according to Claim 1, 2,
10   3, 6, or 7.

18.   An expression vector comprising the polynucleotide of Claim 17.

15   19.   A host cell comprising the expression vector of Claim 18.

20.   The host cell according to Claim 19 wherein the cell is a prokaryotic cell.
20
21.   The host cell according to Claim 20 wherein the cell is an *E. coli* cell.

22.   The host cell according to Claim 19 wherein
25   the cell is a eukaryotic cell.

23. A peptide comprising an amino acid sequence
of the formula:

$b^1b^2b^3CWb^6b^7b^8b^9GCb^{12}b^{13}b^{14}$ (SEQ ID NO: 274)

5 wherein:

b^1 is V, L, I, W, T, Y, or E;

b^2 is L, W, M, Q, or H;

b^3 is W, M, G, Q, or E;

b^6 is F or W;

10   b^7 is T or S;

b^8 is A, P, W, S, E, or D;

b^9 is A, G, Q, E, or K;

b^{12} is V, I, P, D, or E;

b^{13} is V, W, or Y; and

15   b^{14} is P, S, or Q; or a physiologically
acceptable salt thereof, and wherein said peptide is
capable of inhibiting NGF activity.

24. The peptide according to Claim 23 wherein:

20   b^1 is L or I;

b^2 is Q or H;

b^3 is G or M;

b^6 is F or W;

b^7 is T or S;

25   b^8 is E or D;

b^9 is E or K;

b^{12} is V or E;

b^{13} is V, W, or Y;

b^{14} is P, S, or Q.

30

25. The peptide according to Claim 24 comprising
an amino sequence of IHGCWFTEEGCVWQ (SEQ ID NO: 277).

26. The peptide according to Claim 24 comprising
an amino sequence of LQMCWFTEKGCEVP (SEQ ID NO: 278).

27. A composition of matter comprising at least
one peptide according to Claim 23 and at least one
vehicle, wherein said composition of matter is capable
of inhibiting NGF activity.

28. The composition of matter according to Claim
27 wherein said vehicle is selected from the group
consisting of a Fc domain, polyethylene glycol, a
lipid, a cholesterol group, a carbohydrate, and an
oligosaccharide.

29. The peptide according to Claim 23 which is
cyclic.

30. A dimer or multimer of the peptide according
to Claim 23.

31. A composition of matter having the formula:
$$(X^1)_a-F^1-(X^2)_b,$$
wherein:
F^1 is a Fc domain;
X^1 and X^2 are each independently selected from
$-(L^1)_c-P^1$;
$-(L^1)_c-P^1-(L^2)_d-P^2$;

$$-(L^1)_c-P^1-(L^2)_d-P^2-(L^3)_e-P^3; \text{ and}$$
$$-(L^1)_c-P^1-(L^2)_d-P^2-(L^3)_e-P^3-(L^4)_f-P^4;$$

wherein one or more of P^1, P^2, P^3, and P^4 each
independently comprise a peptide according to Claim 23;

5   L^1, L^2, L^3, and L^4 are each independently linkers;
and a, b, c, d, e, and f are each independently 0 or 1,
provided that at least one of a and b is 1; or a
physiologically acceptable salt thereof, and wherein
said peptide is capable of inhibiting NGF activity.

10

       32. The composition of matter of Claim 31 wherein
one or more of P^1, P^2, P^3, and P^4 each independently
comprise a peptide as shown as SEQ ID NO: 277.

15   33. The composition of matter of Claim 31 wherein
one or more of P^1, P^2, P^3, and P^4 each independently
comprise a peptide as shown as SEQ ID NO: 278.

       34. The composition of matter of Claim 31 of the
20 formula: F^1-X^2.

       35. The composition of matter of Claim 32 or
Claim 33 of the formula: $F^1-(L^1)_c-P^1$.

25   36. The composition of matter of Claim 31 of the
formula: $F^1-(L^1)_c-P^1-(L^2)_d-P^2$.

       37. The composition of matter of Claim 31 of the
formula: $P^1-(L^1)_c-F^1-(L^2)_d-P^2$.

30

38.   The composition of matter of Claim 35,
wherein F^1 comprises the amino acid sequence of SEQ ID
NO: 60 or a fragment thereof.

5   39.   A polynucleotide comprising a polynucleotide
sequence encoding the peptide according to Claim 23.

40.   An expression vector comprising the
polynucleotide of Claim 39.

10

41.   A host cell comprising the expression vector
of Claim 40.

42.   The host cell according to Claim 41 wherein
15   the cell is a prokaryotic cell.

43.   The host cell according to Claim 42 wherein
the cell is an *E. coli* cell.

20   44.   The host cell according to Claim 41 wherein
the cell is a eukaryotic cell.

45.   A peptide comprising an amino acid sequence
of the formula: $c^1c^2QCc^5c^6Sc^8c^9GCc^{12}c^{13}c^{14}c^{15}c^{16}$
25   wherein:
         c^1 is V, I, T, Y, N, or K;
         c^2 is L, M, or F;
         c^5 is S, Q, or E;
         c^6 is L, F, W, or Y;
30   c^8 is W, M, T, G, S, or N;
         c^9 is A, V, G, S, or E;

c^{12} is L, P, G, D, or E;

c^{13} is K, I, L, Y, or Q;

c^{14} is A, S, P, V, M, or Q;

c^{15} is L or absent; and

5   c^{16} is E or absent; or a physiologically acceptable salt thereof, and wherein said peptide is capable of inhibiting NGF activity.

46. The peptide according to Claim 45 wherein:

10   c^1 is K or T;

c^2 is L or F;

c^5 is E or Q;

c^6 is L, F, or Y;

c^8 is T;

15   c^9 is S or A; and

c^{12} is P or L.

47. A peptide selected from the group consisting of SEQ ID NOS: 208, 209, 224, 233, 234, 241, 246, 279, 20 and 280, or a physiologically acceptable salt thereof, wherein said peptide is capable of inhibiting NGF activity.

48. A composition of matter comprising at least 25 one peptide according to Claim 47 and at least one vehicle, wherein said composition of matter is capable of inhibiting NGF activity.

49. The composition of matter according to Claim 30 48 wherein said vehicle is selected from the group consisting of a Fc domain, polyethylene glycol, a

lipid, a cholesterol group, a carbohydrate, and an oligosaccharide.

50. The peptide according to Claim 47 which is cyclic.

51. A dimer or multimer of the peptide according to Claim 47.

52. A composition of matter having the formula:
$$(X^1)_a - F^1 - (X^2)_b$$

wherein:

F^1 is a vehicle;

X^1 and X^2 are each independently selected from

$- (L^1)_c - P^1;$

$- (L^1)_c - P^1 - (L^2)_d - P^2;$

$- (L^1)_c - P^1 - (L^2)_d - P^2 - (L^3)_e - P^3;$ and

$- (L^1)_c - P^1 - (L^2)_d - P^2 - (L^3)_e - P^3 - (L^4)_f - P^4;$

wherein one or more of P^1, P^2, P^3, and P^4 each independently comprise a peptide selected from the group consisting of SEQ ID NOS: 208, 209, 224, 233, 234, 241, 246, 279, and 280;

L^1, L^2, L^3, and L^4 are each independently linkers; and a, b, c, d, e, and f are each independently 0 or 1, provided that at least one of a and b is 1; or a physiologically acceptable salt thereof, and wherein said peptide is capable of inhibiting NGF activity.

53. The composition of matter of Claim 52 of the formula: $F^1 - X^2$.

54. The composition of matter of Claim 52 of the formula: $F^1-(L^1)_c-P^1$.

55. The composition of matter of Claim 52 of the formula: $F^1-(L^1)_c-P^1-(L^2)_d-P^2$.

56. The composition of matter of Claim 52 of the formula: $P^1-(L^1)_c-F^1-(L^2)_d-P^2$.

57. The composition of matter of Claim 54, wherein F^1 is an Fc domain or a fragment thereof.

58. The composition of matter of Claim 57 wherein F^1 comprises the amino acid sequence of SEQ ID NO: 60 or a fragment thereof.

59. A polynucleotide comprising a polynucleotide sequence encoding the peptide according to Claim 45.

60. An expression vector comprising the polynucleotide of Claim 59.

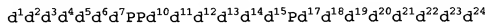61. A host cell comprising the expression vector of Claim 60.

62. The host cell according to Claim 61 wherein the cell is a prokaryotic cell.

63. The host cell according to Claim 62 wherein the cell is an *E. coli* cell.

64.   The host cell according to Claim 61 wherein the cell is a eukaryotic cell.

65.   A peptide comprising an amino acid sequence of the formula:

$$d^1d^2d^3d^4d^5d^6d^7PPd^{10}d^{11}d^{12}d^{13}d^{14}d^{15}Pd^{17}d^{18}d^{19}d^{20}d^{21}d^{22}d^{23}d^{24}$$

wherein:

d^1 is a W, Y, Q, or E;

d^2 is a V, L, F, S, or Q;

d^3 is a W, F, G, S, or Q;

d^4 is a A, Q, D, E, or K;

d^5 is a V, W, G, or R;

d^6 is a M, S, Y, Q, N, E, K, or R;

d^7 is a A, V, L, P, W, Q, or H;

d^{10} is a D or E;

d^{11} is a V or I;

d^{12} is a V, L, F, or Y;

d^{13} is a V, L, G, Q, or E;

d^{14} is a Q, D, or E;

d^{15} is a W or C;

d^{17} is a W, Y, or Q;

d^{18} is a V, T, Q, N, or K;

d^{19} is a A, L, or P;

d^{20} is a P, Q, R, or H;

d^{21} is a V, I, W, D;

d^{22} is a A, I, S, Q, or D;

d^{23} is a L or absent;

d^{24} is a E or absent;

or a physiologically acceptable salt thereof, and wherein said peptide is capable of inhibiting NGF activity.

66. The peptide according to Claim 65 wherein:

d^1 is Q or Y;

d^2 is L;

5   d^3 is W or D;

d^4 is D, E, or K;

d^5 is V, W, or G;

d^6 is Q, K, or R;

d^7 is W or L;

10   d^{10} is E or D;

d^{11} is V or I;

d^{12} is V, L, or F;

d^{13} is V, L, or G;

d^{14} is Q, D, or E;

15   d^{15} is W or C;

d^{17} is W or Y;

d^{18} is Q, K, or N;

d^{19} is P, V, or L;

d^{20} is P or S;

20   d^{21} is V;

d^{22} is Q or D;

d^{23} is a L or absent;

d^{24} is a E or absent.

25   67. A peptide selected from the group consisting
of SEQ ID NOS: 203, 228, 240, 247, and 266, inclusive,
or a physiologically acceptable salt thereof, wherein
said peptide is capable of inhibiting NGF activity.

30   68. A composition of matter comprising at least
one peptide according to Claim 65 and at least one

vehicle, wherein said composition of matter is capable
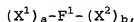of inhibiting NGF activity.

69.   The composition of matter according to Claim
5   68 wherein said vehicle is selected from the group
consisting of a Fc domain, polyethylene glycol, a
lipid, a cholesterol group, a carbohydrate, and an
oligosaccharide.

10   70.   The peptide according to Claim 65 which is
cyclic.

71.   A dimer or multimer of the peptide according
to Claim 65.
15

72.   A composition of matter having the formula:
$$(X^1)_a - F^1 - (X^2)_b,$$
wherein:
F^1 is a vehicle;
20   X^1 and X^2 are each independently selected from
$-(L^1)_c - P^1;$
$-(L^1)_c - P^1 - (L^2)_d - P^2;$
$-(L^1)_c - P^1 - (L^2)_d - P^2 - (L^3)_e - P^3;$ and
$-(L^1)_c - P^1 - (L^2)_d - P^2 - (L^3)_e - P^3 - (L^4)_f - P^4;$
25   wherein one or more of P^1, P^2, P^3, and P^4 each
independently comprise a peptide according to Claim 65;
L^1, L^2, L^3, and L^4 are each independently linkers;
and a, b, c, d, e, and f are each independently 0 or 1,
provided that at least one of a and b is 1; or a
30   physiologically acceptable salt thereof, and wherein
said peptide is capable of inhibiting NGF activity.

73.   The composition of matter of Claim 72 wherein one or more of P^1, P^2, P^3, and P^4 each independently comprise a peptide selected from the group consisting of SEQ ID NOS: 203, 228, 240, 247, and 266.

74.   The composition of matter of Claim 73 of the formula: $F^1 - X^2$.

75.   The composition of matter of Claim 73 of the formula: $F^1 - (L^1)_c - P^1$.

76.   The composition of matter of Claim 73 of the formula: $F^1 - (L^1)_c - P^1 - (L^2)_d - P^2$.

77.   The composition of matter of Claim 73 of the formula: $P^1 - (L^1)_c - F^1 - (L^2)_d - P^2$.

78.   The composition of matter of Claim 75, wherein F^1 is an Fc domain or a fragment thereof.

79.   The composition of matter of Claim 78 wherein F^1 comprises the amino acid sequence of SEQ ID NO: 60 or a fragment thereof.

80.   A polynucleotide comprising a polynucleotide sequence encoding the peptide according to Claim 65.

81.   An expression vector comprising the polynucleotide of Claim 80.

82. A host cell comprising the expression vector of Claim 81.

83. The host cell according to Claim 82 wherein
5   the cell is a prokaryotic cell.

84. The host cell according to Claim 83 wherein the cell is an *E. coli* cell.

10   85. The host cell according to Claim 82 wherein the cell is a eukaryotic cell.

86. A peptide comprising an amino acid sequence of the formula:

15      $f^1f^2f^3f^4f^5f^6f^7f^8f^9f^{10}f^{11}Lf^{13}EQYFf^{18}Lf^{20}PPGf^{24}f^{25}f^{26}$

wherein:

f^1 is A or absent;

f^2 is Q or absent;

f^3 is L, M, T, Q or N;

20   f^4 is A, I, P, T, G, or Q;

f^5 is M, G, E, or D;

f^6 is W or H;

f^7 is L, P, or M;

f^8 is G, L, R, or S;

25   f^9 is A, Q, D, or E;

f^{10} is L, N, or M;

f^{11} is P, R, or S;

f^{13} is L, F, or Y;

f^{18} is A, Q, E, or R;

30   f^{20} is T, M, or I;

f^{24} is L, I, V, or Y;

f^{25} is a L or absent; and

f^{26} is a E or absent, or a physiologically acceptable salt thereof, and wherein said peptide is capable of inhibiting NGF activity.

87. The peptide according to Claim 86 wherein:

f^1 is A or absent;

f^2 is Q or absent;

f^3 is M, Q, or N;

f^4 is I, P, T, or G;

f^5 is M, G, or D;

f^6 is W or H;

f^7 is L or P;

f^8 is G, L, or S;

f^9 is A, Q, or D;

f^{10} is L, N, or M;

f^{11} is P, R, or S;

f^{13} is L or F;

f^{18} is A, Q, or E;

f^{20} is T, M, or I;

f^{24} is L, I, or V;

f^{25} is a L or absent;

f^{26} is a E or absent.

88. A peptide selected from the group consisting of SEQ ID NOS: 210, 230, 232, 236, 239, and 251, inclusive, or a physiologically acceptable salt thereof, and wherein said peptide is capable of inhibiting NGF activity.

89. A composition of matter comprising at least one peptide according to Claim 86 and at least one vehicle, and wherein said peptide is capable of inhibiting NGF activity.

5

90. The composition of matter according to Claim 89 wherein said vehicle is selected from the group consisting of a Fc domain, polyethylene glycol, a lipid, a cholesterol group, a carbohydrate, and an
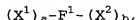
10 oligosaccharide.

91. The peptide according to Claim 86 which is cyclic.

15 92. A dimer or multimer of the peptide according to Claim 86.

93. A composition of matter having the formula:

$$(X^1)_a - F^1 - (X^2)_b,$$

20 wherein:

F^1 is a vehicle;

X^1 and X^2 are each independently selected from

$-(L^1)_c - P^1$;

$-(L^1)_c - P^1 - (L^2)_d - P^2$;

25     $-(L^1)_c - P^1 - (L^2)_d - P^2 - (L^3)_e - P^3$; and

$-(L^1)_c - P^1 - (L^2)_d - P^2 - (L^3)_e - P^3 - (L^4)_f - P^4$;

wherein one or more of P^1, P^2, P^3, and P^4 each independently comprise a peptide according to Claim 86;

L^1, L^2, L^3, and L^4 are each independently linkers;

30 and a, b, c, d, e, and f are each independently 0 or 1, provided that at least one of a and b is 1; or a

physiologically acceptable salt thereof, and wherein
said peptide is capable of inhibiting NGF activity.

94. The composition of matter of claim 93 wherein
one or more of P^1, P^2, P^3, and P^4 each independently
comprise a peptide selected from the group consisting
of SEQ ID NOS: 210, 230, 232, 236, 239, and 251.

95. The composition of matter of Claim 93 of the
formula: F^1-X^2.

96. The composition of matter of Claim 93 of the
formula: $F^1-(L^1)_c-P^1$.

97. The composition of matter of Claim 93 of the
formula: $F^1-(L^1)_c-P^1-(L^2)_d-P^2$.
98. The composition of matter of Claim 93 of the
formula: $P^1-(L^1)_c-F^1-(L^2)_d-P^2$.

99. The composition of matter of Claim 96 wherein
F^1 is an Fc domain or a fragment thereof.

100. The composition of matter of Claim 96
wherein F^1 comprises the amino acid sequence of SEQ ID
NO: 60 or a fragment thereof.

101. A polynucleotide comprising a polynucleotide
sequence encoding the peptide according to Claim 86.

102. An expression vector comprising the
polynucleotide of Claim 101.

103. A host cell comprising the expression vector
of Claim 102.

5   104. The host cell according to Claim 103 wherein
the cell is a prokaryotic cell.

103. The host cell according to Claim 104 wherein
the cell is an *E. coli* cell.

10

106. The host cell according to Claim 103 wherein
the cell is a eukaryotic cell.

107. A peptide comprising an amino acid sequence
15 of the formula:

$$h^1h^2h^3h^4h^5h^6LGh^9h^{10}h^{11}Lh^{13}YFh^{16}Lh^{18}PPGh^{22}h^{23}h^{24}$$
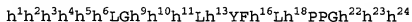
wherein:

h^1 is A or absent;

h^2 is Q or absent;

20   h^3 is V, G, P, or absent;

h^4 is V, T, S, K, or absent;

h^5 is S, E, Q, or D;

h^6 is Q, N, K, or M;

h^9 is S, G, Q, or D;

25   h^{10} is W, Y, or F;

h^{11} is A, L, or M;

h^{13} is Q, N, or Y;

h^{16} is K, H, S, or R;

h^{18} is A, V, L, or I;

30   h^{22} is S, T, or G;

h^{23} is L or absent;

   h^{24} is E or absent; or a physiologically
acceptable salt thereof, and wherein said peptide is
capable of inhibiting NGF activity.

5   108.   The peptide according to Claim 107 wherein:
       h^1 is A or absent;
       h^2 is Q or absent;
       h^3 is P or absent;
       h^4 is T or absent;
10   h^5 is E or D;
       h^6 is Q or N;
       h^9 is E or D;
       h^{10} is W or Y;
       h^{11} is L or M;
15   h^{13} is Q or N;
       h^{16} is K or R;
       h^{18} is V or L;
       h^{22} is S or T;
       h^{23} is L or absent;
20   h^{24} is E or absent.

       109.   A peptide selected from the group consisting
of SEQ ID NOS: 202, 211, 219, 221, 231, 237, and 272,
inclusive, or a physiologically acceptable salt
25 thereof, and wherein said peptide is capable of
inhibiting NGF activity.

       110.   A composition of matter comprising at least
one peptide according to Claim 107 and at least one
30 vehicle, and wherein said peptide is capable of
inhibiting NGF activity.

111.   A composition of matter comprising at least one peptide selected from the group consisting of SEQ ID NOS: 202, 211, 219, 221, 231, 237, and 272,

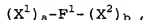5   inclusive, and a vehicle, and wherein said composition of matter is capable of inhibiting NGF activity.

112.   The composition of matter according to Claim 110 wherein said vehicle is selected from the group

10   consisting of a Fc domain, polyethylene glycol, a lipid, a cholesterol group, a carbohydrate, and an oligosaccharide.

113.   The composition of matter according to Claim

15   111 wherein said vehicle is selected from the group consisting of a Fc domain, polyethylene glycol, a lipid, a cholesterol group, a carbohydrate, and an oligosaccharide.

20   114.   The peptide according to Claim 107 which is cyclic.

115.   A dimer or multimer of the peptide according to Claim 107.

25

116.   A composition of matter having the formula:

$$(X^1)_a - F^1 - (X^2)_b ,$$

wherein:

F^1 is a vehicle;

30   X^1 and X^2 are each independently selected from

$-(L^1)_c-P^1;$

$-(L^1)_c-P^1-(L^2)_d-P^2;$

$-(L^1)_c-P^1-(L^2)_d-P^2-(L^3)_e-P^3;$ and

$-(L^1)_c-P^1-(L^2)_d-P^2-(L^3)_e-P^3-(L^4)_f-P^4;$

5   wherein one or more of P^1, P^2, P^3, and P^4 each
    independently comprise a peptide according to Claim
    107;

        L^1, L^2, L^3, and L^4 are each independently linkers;
    and a, b, c, d, e, and f are each independently 0 or 1,
10 provided that at least one of a and b is 1; or a
    physiologically acceptable salt thereof, and wherein
    said peptide is capable of inhibiting NGF activity.

        117.   The composition of matter of Claim 116
15 wherein one or more of P^1, P^2, P^3, and P^4 each
    independently comprise a peptide selected from the
    group consisting of SEQ ID NOS: 202, 211, 219, 221,
    231, 237, and 272.

20   118.   The composition of matter of Claim 117 of
    the formula: F^1-X^2.

        119.   The composition of matter of Claim 117 of
    the formula: $F^1-(L^1)_c-P^1$.
25

        120.   The composition of matter of Claim 117 of
    the formula: $F^1-(L^1)_c-P^1-(L^2)_d-P^2$.
        121.   The composition of matter of Claim 117 of
    the formula: $P^1-(L^1)_c-F^1-(L^2)_d-P^2$.

30

122. The composition of matter of Claim 119 wherein F^1 is an Fc domain or a fragment thereof.

5   123. The composition of matter of Claim 122 wherein F^1 comprises the amino acid sequence of SEQ ID NO: 60 or a fragment thereof.

124. The composition of matter of Claim 123 wherein P^1 is a peptide of SEQ ID NO:219 and L^1 is a
10 peptide of SEQ ID NO:285.

125. The composition of matter of Claim 123 wherein P^1 is a peptide of SEQ ID NO:219 and L^1 is a peptide of SEQ ID NO:286.
15

126. A polynucleotide comprising a polynucleotide sequence encoding the peptide according to Claim 113.

127. An expression vector comprising the
20 polynucleotide of Claim 126.

128. A host cell comprising the expression vector of Claim 127.

25 129. The host cell according to Claim 128 wherein the cell is a prokaryotic cell.
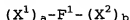
130. The host cell according to Claim 129 wherein the cell is an *E. coli* cell.
30

131. The host cell according to Claim 128 wherein
the cell is a eukaryotic cell.

132. A composition of matter comprising an amino
5   acid sequence of the formula:

$$(X^1)_a - F^1 - (X^2)_b$$

wherein:

F^1 is an Fc domain;

X^1 and X^2 are each independently selected from
10   $-(L^1)_c - P^1$, $-(L^1)_c - P^1 - (L^2)_d - P^2$, $-(L^1)_c - P^1 - (L^2)_d - P^2 - (L^3)_e - P^3$,
and $-(L^1)_c - P^1 - (L^2)_d - P^2 - (L^3)_e - P^3 - (L^4)_f - P^4$;

L^1, L^2, L^3, and L^4 are each independently linkers;

a, b, c, d, e, and f are each independently 0 or
1, provided that at least one of a and b is 1; and
15   P^1, P^2, P^3, and P^4 are each independently sequences
selected from the group consisting of:

i. SEQ ID NO: 1 to SEQ ID NO: 58, inclusive;

ii. SEQ ID NO: 202 to SEQ ID NO: 280,
inclusive;
20   iii. an analog of (i) or (ii); and

iv. a derivative of (i), (ii) or (iii); or a
physiologically acceptable salt thereof, and wherein
said composition of matter is capable of inhibiting NGF
activity.
25

133. The composition of matter of Claim 132
comprising an amino acid sequence of the formula:

$$F^1 - L - P$$

wherein:
30   F^1 is an Fc domain;

L is a linker; and

P is selected from the group consisting of:

     i. SEQ ID NOS: 8, 10, 23, and 24;

    ii. an analog of (i); and

    iii. a derivative of (i) or (ii); or a

5 physiologically acceptable salt thereof, and wherein
said composition of matter is capable of inhibiting NGF
activity.

    134. A method of treating or preventing a disease

10 or disorder associated with NGF activity comprising
administering, to a human or animal subject, a
therapeutically effective amount of a composition of
matter according to Claim 124, 125, 156, 157, 158, 159,
160, 161, 162, or 163.

15

    135. The method according to Claim 134 wherein
the disease or disorder is selected from the group
consisting of neurologic pain, painful diabetic
neuropathy, post-herpetic neuralgia, inflammatory pain,

20 migraine, asthma, hyperactive bladder, psoriasis and
cancer.

    136. The method of Claim 134 wherein the disease
or disorder is pain.

25

    137. The method of Claim 134 wherein the disease
or disorder is selected from the group consisting of
acute pain, dental pain, pain from trauma, surgical
pain, pain resulting from amputation or abscess,

30 causalgia, demyelinating diseases, trigeminal
neuralgia, cancer, chronic alcoholism, stroke, thalamic

pain syndrome, diabetes, acquired immune deficiency
syndrome ("AIDS"), toxins and chemotherapy, general
headache, migraine, cluster headache, mixed-vascular
and non-vascular syndromes, tension headache, general
5   inflammation, arthritis, rheumatic diseases, lupus,
osteoarthritis, inflammatory bowel disorders,
inflammatory eye disorders, inflammatory or unstable
bladder disorders, psoriasis, skin complaints with
inflammatory components, sunburn, carditis, dermatitis,
10   myositis, neuritis, collagen vascular diseases, chronic
inflammatory conditions, inflammatory pain and
associated hyperalgesia and allodynia, neuropathic pain
and associated hyperalgesia and allodynia, diabetic
neuropathy pain, causalgia, sympathetically maintained
15   pain, deafferentation syndromes, asthma, epithelial
tissue damage or dysfunction, herpes simplex, post-
herpetic neuralgia, disturbances of visceral motility
at respiratory, genitourinary, gastrointestinal or
vascular regions, wounds, burns, allergic skin
20   reactions, pruritis, vitiligo, general gastrointestinal
disorders, colitis, gastric ulceration, duodenal
ulcers, vasomotor or allergic rhinitis, or bronchial
disorders.

25   138. A method for inhibiting pain or promoting
analgesia comprising administering, to a human or
animal subject, a therapeutically effective amount of a
composition of matter according to Claim 124, 125, 156,
157, 158, 159, 160, 161, 162, or 163
30

139. A peptide comprising an amino acid sequence
selected from the group consisting of:
        i. SEQ ID NOS: 8, 10, 23, or 24;
        ii. an analog of (i); and
5   iii. a physiologically acceptable salt of (i) or
(ii), wherein said peptide is capable of inhibiting NGF
activity.

140. A composition of matter comprising at least
10 one peptide according to Claim 139 and at least one
vehicle, wherein said composition of matter is capable
of inhibiting NGF activity.

141. The composition of matter according to Claim
15 140 wherein said vehicle is selected from the group
consisting of a Fc domain, polyethylene glycol, a
lipid, a cholesterol group, a carbohydrate, and an
oligosaccharide.

20   142. The peptide according to Claim 139 which is
cyclic.

143. A dimer or multimer of the peptide according
to Claim 139.
25

144. A composition of matter having the formula:
$$(X^1)_a - F^1 - (X^2)_b$$
wherein:
F^1 is a vehicle;
30   X^1 and X^2 are each independently selected from
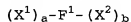
$-(L^1)_c-P^1;$

$-(L^1)_c-P^1-(L^2)_d-P^2;$

$-(L^1)_c-P^1-(L^2)_d-P^2-(L^3)_e-P^3;$ and

$-(L^1)_c-P^1-(L^2)_d-P^2-(L^3)_e-P^3-(L^4)_f-P^4;$

5   wherein one or more of P^1, P^2, P^3, and P^4 each independently comprise a peptide according to Claim 139;

     L^1, L^2, L^3, and L^4 are each independently linkers;

     and a, b, c, d, e, and f are each independently 0 or 1,

10   provided that at least one of a and b is 1; or a physiologically acceptable salt thereof, and wherein said peptide is capable of inhibiting NGF activity.

     145.   The composition of matter of Claim 144 of

15   the formula: F^1-X^2.

     146.   The composition of matter of Claim 144 of the formula: $F^1-(L^1)_c-P^1$.

20   147.   The composition of matter of Claim 144 of the formula: $F^1-(L^1)_c-P^1-(L^2)_d-P^2$.

     148.   The composition of matter of Claim 144 of the formula: $P^1-(L^1)_c-F^1-(L^2)_d-P^2$.

25

     149.   The composition of matter of Claim 145, wherein F^1 is an Fc domain or a fragment thereof.

     150.   A polynucleotide comprising a polynucleotide

30   sequence encoding the peptide according to Claim 139.

151. An expression vector comprising the polynucleotide of Claim 150.

152. A host cell comprising the expression vector of Claim 151.

153. The host cell according to Claim 152 wherein the cell is a prokaryotic cell.

154. The host cell according to Claim 153 wherein the cell is an *E. coli* cell.

155. The host cell according to Claim 152 wherein the cell is a eukaryotic cell.

156. The composition of matter of Claim 58 wherein P^1 is a peptide of SEQ ID NO:241 and L^1 is a peptide of SEQ ID NO:285.

157. The composition of matter of Claim 58 wherein P^1 is a peptide of SEQ ID NO:241 and L^1 is a peptide of SEQ ID NO:286.

158. The composition of matter of Claim 96 wherein P^1 is a peptide of SEQ ID NO:251 and L^1 is a peptide of SEQ ID NO:285.

159. The composition of matter of Claim 96 wherein P^1 is a peptide of SEQ ID NO:251 and L^1 is a peptide of SEQ ID NO:286.

160. The composition of matter of Claim 54 wherein P is the peptide shown in SEQ ID NO:224 and L^1 is the peptide linker shown in SEQ ID NO:285.

5   161. The composition of matter of Claim 54 wherein P^1 is a peptide of SEQ ID NO:224 and L^1 is a peptide of SEQ ID NO:286.

162. The composition of matter of Claim 96

10   wherein P^1 is the peptide shown in SEQ ID NO:239 and L^1 is the peptide shown in SEQ ID NO:285.

163. The composition of matter of Claim 96 wherein P^1 is a peptide of SEQ ID NO:239 and L^1 is a

15   peptide of SEQ ID NO:286.